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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,930	02/17/2004	Zhu Guifang	yeh-pt001	9370

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EXAMINER

SAFAVI, MICHAEL

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 10/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/779,930	Applicant(s) ZHU GUIFANG	
	Examiner M. Safavi	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claim 1 is objected to because of the following informalities: in line 4, --front-- should be inserted for "font". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 1,351,480 to Leigh in view of U.S. Patent No. 1,307,825 to Marshall, U.S. Patent No. 6,564,412 to Henley et al. and U.S. Patent No. 6,568,011 to Fisher et al.

Leigh discloses an inflatable mattress comprising an outer shell (1, 2) having a plurality of internal built-in parallel separators (7) that form separate parallel pathways (8) inside of the outer shell and two conduits (not referenced) wherein a first conduit is located at a front opening and a second conduit is located at a back opening (see Fig. 6) of these passageways. Leigh further discloses an inflatable longitudinal inner chamber (9) having an air inlet (10) and means for inserting evenly the inner chamber inside the outer shell along the pathways to provide an even firm support of the mattress.

Leigh fails to teach the separators being I-beam. However, Marshall discloses a mattress comprising an outer shell having a plurality of built-in internal parallel I-beam separators (5) that form separate parallel pathways inside the outer shell. One of ordinary skill in the art concerned with increasing the height of the mattress as well as fashioning a more uniform pathway would have found it obvious to replace the Leigh dividing partition 7 with I-beam partitions as is taught by Marshall.

Leigh also fails to teach zippers installed on the conduit-sides of the outer shell. However, Leigh does teach the use of "any suitable kind of fastenings," specifically "a frictionally acting split plug 11, and a cooperating socket 12, into which the plug is spring by hand pressure." Henley et al. teaches that it is well known in the mattress art to secure a top cover (18) to a base (12) with suitable fasteners such as zipper, snaps, or other coupling mechanism. Therefore, because these two coupling mechanisms were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a zipper for the Leigh snap fasteners 11/12 so as to establish a more complete attachment between the upper and lower outer coverings as is taught by Henley et al.

Leigh also fails to disclose the inflatable longitudinal inner chamber having an air outlet. Fisher discloses an inflatable chamber (140) comprising an air inlet (110) and an air outlet (112). The air outlet has a wide opening for fast deflation. One of ordinary skill in the art concerned with rapidly deflating the longitudinal chamber would have found it obvious to provide Leigh with an air outlet as is taught by Fisher.

As concerns claim 3, Leigh discloses the shell having at least 7 to 9 parallel separators.

Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over Leigh in view of Marshall, Henley et al. and Fisher et al. as applied to claim 1 above, and further in view of U.S. Patent No. 3,772,717 to Yuen et al.

Leigh, as modified, fails to teach the air inlet and the air outlet being located at opposite tip ends of the chamber. Fisher teaches the air inlet and the air outlet being located at the same end of the air chamber. However, it would have further been obvious to one having ordinary skill in the art at the time the invention was made to relocate the air outlet so that the inlet and outlet are at opposite tips of the air chamber as is taught by Yuen et al, and particularly since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Leigh, as modified, teaches that the inner chamber is a continuous length of rubber tubing and thus fails to disclose PVC-like material. However, Yuen et al. teaches an inflatable mattress and cushion "made from any suitable material provided it is flexible and impermeable to the fluids being used in the mattress. Suitable materials include rubber, plastics such as PVC and the like." Thus, Yuen et al. teaches rubber and PVC-like material being equivalents in the mattress art. Therefore, because these materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute PVC-like material for the rubber as is taught by Yuen et al.

Response to Arguments

Applicant's arguments filed July 25, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that "the examiner combines several different features disclosed in 5 different issued patents", reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

With regard to Applicant's arguments that "there is no teaching suggestion or motivation within the prior art to combine the prior art as the combination of features recited in Applicant's claims" or that "not all of these combinations of this invention are suggested to be combined by these prior art", the teaching, motivation, and suggestion have been established in each of the above rejections. Obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either

in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

As for Applicant's argument at the top of page 3 of the response, the instant claims define an invention utilizing old and well-known features in an old and well-known manner for an old and well-known purpose as is evidenced in the applied prior art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Safavi whose telephone number is (703) 308-2481. The examiner can normally be reached on Mon.-Thur., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703) 308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**MICHAEL SAFAVI
PRIMARY EXAMINER
ART UNIT 354**

M. Safavi
October 19, 2004